

## **RESPONSE**

This is a response to the Office Action dated March 1, 2005. The Examiner has objected to various informalities and typographic errors in the specification. Further, claims 39 and 58 were rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the enablement requirement. Claims 53 and 59-64 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 53 and 59 were rejected under 35 U.S.C. § 112, for lack of antecedent basis. In addition, claims 32-38, 40-57 and 59-64 were rejected under 35 U.S.C. § 103(a) as being unpatentable over: U.S. Pub 2002/0103772 (“Chattopadhyay”) in view of U.S. Patent 5,673,316 (“Auerbach”).

The rejections from the Office Action of March 1, 2005 are discussed below. No new matter has been added. Reconsideration of the application is respectfully requested in light of the above amendments and the following remarks.

### **I. DRAWING OBJECTIONS**

The Examiner objected to the drawings as containing various informalities. With this response, appropriate corrections have been made via amendments to specification as provided above and disclosed below. No new matter has been added. In particular, the following corrections have been made:

1. On page 31, paragraph 83, “connected to a power utility 700” was added so that the opening sentence now reads: “For example, referring now to Figure 7, an IED 711 is connected to a network 710 and measures the reliability of the power distribution system 701 which supplies power to loads 722 724 within a customer site 705 connected to a power utility 700.”;
2. On pages 31-31, paragraph 85, “within a customer network 812” was added so that the third sentence now reads: “For example, as shown in Figure 8, an IED 800 is connected to a network 810 within a customer network 812.”

Accordingly, Applicants respectfully request that the Examiner withdraw these objections to the Drawings.

## **II. SPECIFICATION OBJECTIONS**

The Examiner objected to the specification as containing various informalities and typographic errors. No new matter has been added. A substitute specification has NOT been included with this response. The specification has been amended as shown above.

In particular, the following corrections have been made:

1. On page 15, paragraph 56, line 9, the number “120,” was added as shown in the following sentence: “The IED's 102-109 are further interconnected with each other and back end servers 120, 121, 122, 123, 124 via a network 110...”;
2. On page 16, paragraph 58, line 8, “IED 102-19” was corrected to “IED 102-109”;
3. On page 26, paragraph 72, line 1, “power distribution system 301” was changed to “power distribution system 300”;
4. On page 46, paragraph 112, line 10, “a transformation by 1320” was changed to “a transformation by incremental data processing 1320”;
5. On page 46, paragraph 112, line 11, “Additional transformations 1330” was changed to “Additional transformations by incremental data processing 1330”;
6. On page 46, paragraph 112, lines 11-12, “output 1340” was changed to “output into data sink 1340”.

Accordingly, Applicants respectfully request that the Examiner withdraw these objections to the Specification.

## **III. REJECTIONS UNDER 35 U.S.C. § 112**

The Examiner rejected claims 39 and 58 under 35 U.S.C. § 112, first paragraph, for failing to comply with the enablement requirement. Claims 53 and 59-64 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 53 and 59 were also rejected under 35 U.S.C. § 112, for lack of antecedent basis.

With this amendment, claim 39 has been cancelled. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 39.

Claim 58 relates to the device sending power management commands that have authentication keys. Those authentication keys are labeled as third and fourth authentication key because the independent claim from which claim 58 depends, claim 50, has authentication keys for received power management commands. This is enabled at least in page 26, paragraph 71,

where the IED can “send or receive data and commands to or from the IED.” The “commands sent to or from the IED are coupled with the appropriate encryption key.” *Id.* Examples of this encryption of commands are in paragraph 71. The specification discloses multiple authentication keys for power management commands. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 58.

Claim 53 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite and also under 35 U.S.C. § 112, for lack of antecedent basis. Claim 53 has been amended to correct the antecedent basis error. As a result of this correction, Applicant submits that claim 53 is no longer indefinite because it particularly points out and distinctly claims the possible formats of the communications that go over the network from the network interface. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 53.

Claim 59 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite and also under 35 U.S.C. § 112, for lack of antecedent basis. Claim 59 has been amended to correct the antecedent basis. Energy distribution network was corrected to energy distribution system which has antecedent basis in the preamble of the claim. As a result of this correction, Applicant submits that claim 59 is no longer indefinite because it particularly points out and distinctly claims an energy management architecture for managing the flow of electricity and operative to encrypt power management data. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 59.

Claims 60-64 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicant suggests that the amendment to claim 59 results in the dependent claims 60-64 no longer being indefinite. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 60-64.

#### **IV. REJECTIONS UNDER 35 U.S.C. § 103(a)**

Claims 32-38, 40-57 and 59-64 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chattopadhyay in view of Auerbach. Applicants submit that claims 32-38, 40-57 and 59-64 are patentable over Chattopadhyay in view of Auerbach because Chattopadhyay does not qualify as prior art and, further, that one of ordinary skill in the art would not be motivated to combine these references.

Chattopadhyay discloses a “system for evaluating real-time power flow. [The system collects] measurement data associated with at least one point in a power transmission network and a server...operable to process measurement data to determine a current. A client in communication with the server...display[s] the current...and a cost associated with the current.” Chattopadhyay, Abstract.

Auerbach discloses a “method and apparatus to create, distribute, sell and control access to digital documents using secure cryptographic envelopes.” Auerbach, Abstract. Auerbach further discloses information parts that are encrypted with an encryption key. *Id.*

Independent claims 32, 45, 50 and 59 generally relate to an energy management device or system operative to encrypt power management data or commands. Claim 32 relates to an energy management device that generates and encrypts power management data, wherein “the power management data comprises first and second portions, said first portion associated with a first decryption key and said second portion associated with a second decryption key, such that said first portion is capable of being decrypted only with said first decryption key and said second portion is capable of being decrypted with said second decryption key.” Claim 45 relates to an energy management device that “receive[s] a power management command from said network, wherein said power management command comprises first and second command portions, said first command portion associated with a first command decryption key and said second command portion associated with a second command decryption key, such that said first command portion is capable of being decrypted with said first command decryption key and said second command portion is capable of being decrypted with said second command decryption key.” Claim 50 relates to an energy management device that is operative to receive a power management command wherein the “energy distribution system interface to perform said first power management function if said power management command includes said first authentication key and cause said energy distribution system interface to perform said second power management function if said power management command includes said second authentication key.” Claim 59 relates to an energy management architecture including an energy management device that generates and encrypts power management commands and power management data, “wherein said encrypted power management data comprises first and second portions, said first portion associated with a first decryption key and said second portion associated with a second decryption key, such that said first portion is capable of being decrypted

only with said first decryption key and said second portion is capable of being decrypted with said second decryption key.”

Chattopadhyay does not qualify as prior art under 35 U.S.C. § 102 because the current application claims priority predating Chattopadhyay. Chattopadhyay was filed on Jan. 31, 2001, however, the present application claims priority back to at least U.S. Pat. Application Ser. No. 09/723,564 filed November 28, 2000 (Attorney Docket No. 6270/48) (‘564 application). The ‘564 application discloses multiple encryption keys in an energy management device on page 26, line 30 through page 27, line 17 of the ‘564 application. As a result, the present application properly claims priority to the ‘564 application which was filed on November 28, 2000, whereas Chattopadhyay was filed on January 31, 2001. Therefore, Chattopadhyay does not qualify as prior art because the present application claims priority preceding Chattopadhyay. Applicants submit that claims 32-64 are patentable over the cited references.

It should be noted that the present application ultimately claims priority back to December 30, 1994. It claims priority to the ‘564 application filed November 28, 2000. The ‘564 application claims priority to U.S. Pat. Application Ser. No. 08/798,723 filed February 12, 1997 (Attorney Docket No. 6270/9), abandoned, which claims priority to U.S. Pat. Application Ser. No. 08/369,849 filed December 30, 1994 (Attorney Docket No. 6270/6) now U.S. Pat. No. 5,650,936. However, at the very least, the application is entitled to priority back to the ‘564 application as discussed above which predates the Chattopadhyay reference.

Regardless of Chattopadhyay’s not qualifying as prior art, one of ordinary skill in the art would not be motivated to combine Auerbach with Chattopadhyay. Chattopadhyay does teach a power measurement device with “generally available ... encryption techniques.” Chattopadhyay, para. 33. However, Chattopadhyay fails to disclose encrypted portions associated with encryption keys where the portions are capable of being decrypted only with the appropriate encryption key. Auerbach teaches an encryption technique using cryptographic envelopes; however, the cryptographic envelopes are for scenarios in which a user purchases encryption keys to gain access to the cryptographic envelope. Auerbach, col. 6, lines 44-48 and col. 1, lines 60-65. The requirement of purchasing an encryption key is counter to Chattopadhyay, which does not require a purchase for encryption between “the server hardware platform 50 and the clients 70.” Chattopadhyay, para. 33. Chattopadhyay does not contemplate clients 70 that do not have access to the hardware platform 50. Chattopadhyay, figure 1. Consequently, one of

ordinary skill in the art would not be motivated to combine Auerbach with Chattopadhyay because the cryptographic envelopes disclosed in Auerbach are designed for e-commerce applications in which a purchase is needed for decryption. Chattopadhyay is directed to securely transmitting information between entities which are authorized to have access to the information. The encryption is designed to prevent a third party from gaining access to that information. Auerbach is directed to transmitting content to a user if the user has paid for the access to the content, so the encryption is designed to provide content to paying customers. Auerbach, col. 1, lines 60-65.

For the reasons described above that Chattopadhyay is not prior art and further that there is no motivation to combine Chattopadhyay with Auerbach, Applicants respectfully request that the Examiner withdraw this rejection.

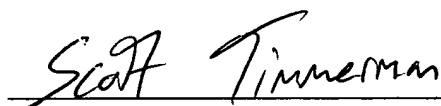
### CONCLUSION

Each of the rejections in the Office Action dated March 1, 2005 has been addressed and no new matter has been added. Applicants submit that all of the pending claims are in condition for allowance and notice to this effect is respectfully requested. The Examiner is invited to call the undersigned if it would expedite the prosecution of this application.

Respectfully submitted,

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Date

  
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